

11. (Amended) A method of treating a patient having a disease or disorder, the method comprising the steps of:

a) exposing a population of quiescent cells to a retroviral packaging cell line in vitro, said packaging cell line expressing nucleic acid encoding a growth factor so that the growth factor is displayed on the surface of the cell line, the cell line or retroviral particles carrying a vector comprising a nucleic acid encoding a polypeptide for treating said disease or disorder, wherein the surface bound growth factor induces the quiescent cells to divide, so that the nucleic acid encoding the polypeptide for treating said disease or disorder can incorporate into the genome of the cells; and

b) administering to the patient an amount of the cells of step (a) effective to treat said patient's disease or disorder.

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(Once amended) The method [use] of claim 11 wherein the cells are administered by

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implantation into the patient.

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1. (Amended) A method of transforming a population of quiescent cells with a nucleic acid encoding a polypeptide for treating a disease or disorder, the method comprising:

exposing the cells to ~~[(a)]~~ a retroviral packaging cell line expressing nucleic acid encoding a growth factor, ~~[or (b) retroviral particles expressing nucleic acid encoding the growth factor as a fusion with a viral envelope protein]~~ so that the growth factor is displayed on the surface of the cell line [or the viral particles], the cell line [or retroviral particles] carrying a vector comprising the nucleic acid encoding the polypeptide for treating the disease or disorder, wherein the surface bound growth factor induces the cells to divide, so that the nucleic acid encoding the polypeptide for treating a disease or disorder can incorporate into the genome of the cells.

20 2. The method of claim 1 wherein the quiescent cells are haematopoietic stem cells.

21 3. (Once amended) The method of claim 1 [or claim 2] wherein the growth factor is  
22 stem cell factor (SCF) or FLT3 ligand.  
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(Amended) The method of claim 1 wherein the cell line [or retroviral particles] displays multiple growth factors.

5. (Once amended) The method of claim 1 [any one of the preceding claims] wherein the growth factor is expressed as a fusion with a viral envelope protein and is attached to the N-terminus of a retroviral envelope protein.

6. (Once amended) The method of claim 5 [any one of the preceding claims] wherein the growth factor is expressed as a fusion with a viral envelope protein and is fused to the envelope protein via a cleavable linker.

7. (Once amended) The method of claim 1 [any one of the preceding claims] wherein the envelope protein is viral envelope SU protein.

8. (Once amended) The method of claim 1 [any one of the preceding claims] wherein the retroviral packaging cell line further expresses nucleic acid encoding a receptor to target the cells to the bone marrow and/or an immunosuppressive factor so that the receptor and/or immunosuppressive factor are displayed on the cell surface.